

Pandemic Influenza

Preparedness Guidelines for Manitoba Local Governments
November 2005



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INTRODUCTION

Over the past several years, we have become more aware of the likely eventuality of a pandemic and its potential impact on public health, the ability to maintain essential services and the economy.

A pandemic influenza is a serious public health concern. It could cause a great deal of illness and death. Manitobans, like others around the world, are preparing to respond when the next pandemic arrives, even if we don't know when that will be.

An influenza pandemic affects much more than just the health care system. It is a crisis that affects all aspects of society. It must be managed by the co-ordinated participation and co-operation of governments, businesses, organizations and citizens. Because it is a community hazard, you (the municipal government) are responsible for taking the lead in preparing the community to respond to, and recover from, this type of emergency.

Unlike other hazards in Manitoba, a pandemic represents unique challenges that may not be addressed in your existing community emergency plan. You must meet with your regional health authority and other local stakeholders to consider the issues that are likely to arise during a pandemic; determine how these issues can be handled in your community;

and develop a comprehensive and co-ordinated pandemic influenza contingency plan specific to your community.

These guidelines will help local governments plan and prepare for a pandemic. Although they do not provide all the answers, they raise some key issues and make suggestions for dealing with them. Local government and the community must determine how best to manage a pandemic emergency.

This guide is one part of a strategy by the Province of Manitoba to prepare government, businesses and other organizations to help create a co-ordinated, effective response to a pandemic. This strategy includes guidelines, communications and training sessions. For further information, see the contacts at the back of this guide.

The term *local government* refers to municipalities, northern affairs communities, or First Nations communities.

1. UNDERSTAND THE HAZARD AND ITS EFFECTS

To develop a contingency plan it is useful to apply a plausible, worst-case scenario describing the nature of the event causing the emergency and the specific challenges that the community will face.

This section provides some background on an influenza pandemic and its potential impact. Apply this information to your community to create a scenario of what a pandemic would be like and the specific challenges and difficulties it may create in your community.

1.1 Characteristics of Influenza

Influenza A is the type involved in all known influenza pandemics. Viruses can undergo major changes or shifts in makeup, producing a completely new strain. Most people do not have specific immunity to these strains of influenza and large numbers of individuals will become infected as it spreads.

For a new influenza virus to cause a pandemic, it must be able to:

- infect people (not just mammals and birds)
- cause illness in a high proportion of those infected
- spread easily from person to person

All previous influenza pandemics had these characteristics. Although no one knows exactly how the next pandemic will affect us, we can make a number of assumptions, based on previous pandemics and medical research.

1.1.1 Influenza and Assumptions about Pandemic Influenza

One of the key planning assumptions held by public health experts is that a pandemic influenza will behave somewhat like ordinary influenza.

Influenza transmission:

Influenza is highly contagious and spreads very quickly among the population, especially in crowded situations.

The influenza virus enters the body through the nose or throat by:

- inhaling droplets produced by the coughing or sneezing of infected persons
- touching the mouth, eyes or nose after:
 - hand-to-hand contact with infected individuals
 - touching surfaces or handling objects contaminated by infected individuals

Once someone is infected with the influenza virus, it usually takes from one to three days to develop symptoms.

The disease typically follows these steps:

- Persons with influenza can be contagious from the day before they develop symptoms up to seven days afterwards (typically three to five days in healthy adults and up to seven days in children). This time frame may be longer in people with decreased immune systems.
- Not everybody who comes in contact with influenza virus will become ill, however they may still spread the infection to others.
- Forty-eight hours after exposure, the symptoms start to appear.
- Flu symptoms can last four to seven days. A cough and general fatigue may persist for several weeks afterward.
- It is important to note that people can be infected and contagious before they become ill. This is why it is difficult to contain influenza.
- Some people who get influenza also develop secondary bacterial infections including pneumonia, which can result in prolonged illness or death.

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When a pandemic does begin, the assumptions about the strain of the disease will need to be checked against the latest available information. Plans can then be updated as necessary.

1.1.2 Population Impact

During an influenza pandemic, much of the population will become ill and some will die. It is expected that there will be more illness and death during a pandemic than experienced during a regular influenza season. This may be made worse by decreased availability of health care during the pandemic.

Influenza typically has the greatest impact (complications, death) on the very young, the very old and those with suppressed immunity. However, pandemic influenza has affected different age groups in the past, including 20- to 40- year-olds, as was the case during the 1918-1919 pandemic.

Public health experts assume that, during an influenza pandemic, 35 per cent of people will become ill enough to miss work. Of those who become ill, more than one per cent could die.

1.1.3 Management of Influenza

a) Vaccines

Vaccination is the most effective way to protect the public from pandemic influenza. Vaccines cause the body to produce specific antibodies against the flu virus in the vaccine, providing immunity from the virus. The vaccine contains inactive virus, so it cannot cause influenza.

Developing a vaccine to protect the population from a specific strain of influenza is our best defence. To develop a pandemic influenza specific vaccine, the virus must be isolated in the laboratory before production can start. It could take four to six months before the first shipment of vaccine is available in our province. Manitoba Health's goal is to immunize the entire population as quickly as possible once the vaccine becomes available. The vaccine will be available in batches, so Manitobans will be immunized according to nationally agreed upon priority groups.

b) Antiviral Drugs

Antivirals are drugs used to prevent and treat influenza early. If taken within 48 hours of getting sick, they can reduce influenza symptoms, shorten the length of the illness and potentially reduce serious complications and deaths. Antivirals work by reducing the ability of the virus to reproduce but they do not provide immunity from the virus.

Antiviral drugs, given at the onset of influenza, may help but are not likely to be available in sufficient quantities to treat the majority of the population. Priority groups have been proposed through national collaboration and agreement. Manitoba will be using these priority groups for antiviral

distribution during a pandemic.

c) Antibiotics

Since influenza is not caused by bacteria, antibiotics will be of no value other than to help combat secondary infections, such as bacterial pneumonia.

1.1.4 Area of Impact

A pandemic is anticipated to affect all Manitobans, the rest of Canada, North America and the world. In some emergencies, neighbouring local governments, other levels of government and nongovernmental organizations can focus their personnel and resources on a small area. In a pandemic, demand for people and resources will likely be high across the province and outside support will be limited.

1.1.5 Warning Period

Given the mobile nature of today's society, a disease can spread very rapidly. Disease surveillance and attempts to contain a pandemic may slow the spread of the disease but it is likely it will be impossible to contain it. We anticipate having up to three months' warning from the time a pandemic is declared by the World Health Organization to the time the virus arrives in Canada. This is based on the assumption that a pandemic will start elsewhere in the world and then spread to North America. It is possible that the warning period may be shorter.

To learn more about influenza and pandemic, talk to your regional health authority or see the Manitoba Health resources in Appendix A.

www.gov.mb.ca/health/publichealth/cmoh/pandemic.html

1.1.6 Duration

A pandemic may last up to two years and, based on previous pandemics, may occur in waves. Each wave could last six to eight weeks and be separated by three to nine months.

1.2 Impact on Society

The widespread nature of a pandemic is expected to have a significant impact on many aspects of society in Manitoba.

1.2.1 Impact on Local Government

a) Employee Absenteeism

One of the most serious organizational risks posed by a pandemic is a reduction in the workforce. This may be due to:

- fear of becoming infected at work and other public places
- family commitments that include caring for sick family members, friends, neighbours, school or day care closures

Based on information gathered during a mild pandemic (1957-1958), it is estimated that absenteeism rates could be around 20 per cent. Up to 33 per cent of health care providers could miss work. In a more severe pandemic, these rates could be much higher, depending on the nature of the virus and the age groups most severely affected.

- volunteering time in the community to other essential needs
- illness / quarantine due to exposure to the virus
- death

Absenteeism will also be affected by subsequent waves of the pandemic.

Some key employees may become ill or even die during the pandemic, which means significant loss of specific or unique knowledge and skills to businesses and agencies.

b) Supply Chain Problems

Your local government operations depend on suppliers for services, materials, equipment, parts or supplies. During a pandemic, both local suppliers and those located in other areas are likely to experience operational, production and shipping difficulties. They, too, may be dealing with loss of workforce, loss of their own suppliers and shipping difficulties from potential border closures or delays as countries try to contain the spread of the disease.

The demand for certain types of supplies may increase dramatically during a pandemic and may be very difficult to obtain quickly. Some supplies may not be available at all.

1.2.2 Impact on Other Local Governments

Other local governments will experience the same personnel and supply chain issues as yours. You may not be able to rely on mutual-aid agreements with neighbouring communities. However, pooling staffing and equipment resources for various critical services may still be considered.

1.2.3 Impacts on Other Levels of Government

Other levels of government will also experience personnel and supply chain problems. They have business continuity plans for key departments and agencies to maintain basic services, however you should expect that service disruptions will occur at times.

a) Health Care

Along with addressing the challenges of an affected workforce, the health care system is expected to be overwhelmed by demand for urgent care. Manitoba Health and the regional health authorities have plans and resources to manage these issues. Local governments may be requested to provide facilities, material and personnel to support health care operations. It is recommended that local governments collaborate with regional health authorities and other local agencies to develop a comprehensive, co-ordinated response plan.

b) Schools

The decision as to whether to order school closures will be made by public health officials after consideration of the current situation at the time of a pandemic. They will likely be closed in the early stages of a pandemic.

1.2.4 Impact on Businesses and Economy

Employee absenteeism and supply chain issues may significantly affect productivity and the provision of services in your community. Consider the following potential business issues during a pandemic:

- Businesses where large numbers of people congregate, such as transit systems, restaurants, some retail businesses, theatres, sporting venues and community centres, may be hit hard financially due to public fear.
- Some businesses that supply basic retail services, such as grocery stores and pharmacies, may not be able to operate or may run short of inventory due to production or shipping problems in other areas.
- Financial losses to many small and midsize businesses during a pandemic will exceed their capacity to recover. It is possible that businesses may fail, adding to the long-term economic impact on the community.

- Unemployment, caused by layoffs and business failures, will reduce the amount of cash flowing through the community with long-term ripple effects throughout the local economy.
- Tax revenue at all levels will diminish during an extended period of increased costs associated with emergency preparations, response and recovery.

2. FORM A PLANNING TEAM

2.1 Invite Stakeholder Participation

The first step in developing a pandemic contingency plan is to form a planning team with a wide range of stakeholders from your community and surrounding region. Joint planning creates better working relationships. By sharing knowledge and ideas, understanding each others' roles, resources and limitations and co-ordinating plans, you can reduce overlap and duplication and ensure all emergency needs are addressed. Be sure to involve all stakeholders throughout the planning process. You will need their support during a pandemic.

Some individuals or groups you may wish to include in your joint planning group include:

Local Government

- local government council
- local government emergency preparedness co-ordinator
- local government department managers

Regional

- regional health authority
- local physicians and nurses
- infection control practitioners, infectious disease specialists
- public health inspectors
- occupational health and safety officers
- school board, local teachers, child-care facility managers/owners
- adjoining municipalities, northern affairs or First Nations communities
- RCMP
- correctional facilities
- child and family service agencies

Provincial Government

- Manitoba Emergency Measures Organization
- Manitoba Labour, Occupational Health and Safety
- Manitoba Health
- Manitoba Family Services and Housing

Business

- local chambers of commerce
- key businesses or major employers

Nongovernment Organizations

- Red Cross
- Salvation Army
- church groups
- local cultural and ethnic groups

2.2 Delegate Responsibilities and Tasks

Assign responsibility to administer and co-ordinate the development and maintenance of the local pandemic contingency plan.

This is usually the responsibility of the community emergency co-ordinator, who manages other details of the community's emergency preparedness program.

Individual participants and organizations also need to be made aware they must develop their own plans to ensure continuity of their own operations and support the community's plan.

2.3 Support Stakeholder Planning

It is likely that some individuals or organizations on the planning team will not have any type of emergency planning experience. They will need some help getting started and also at various points in the planning process. Providing this guideline or associated business guidelines, identifying links to relevant government and nongovernment sources of emergency preparedness, and regular meetings to share ideas, information and suggestions will help.

3. PLAN OBJECTIVES

The first step is to identify the objectives of a municipal or community pandemic response plan. The plan should include:

3.1 Maintain Essential Services

Protect and maintain critical community services including police, fire, transportation, water and sewer services. The loss of these would make the effects of the pandemic on the community even worse.

3.2 Employee Protection

Take reasonable measures to reduce employee absenteeism by creating a workplace that reduces the risk of influenza exposure. Provide a caring, supportive work environment during this time of increased stress.

3.3 Respond to the Needs of the Emergency

The local government will be required to co-ordinate its own response to the pandemic emergency. It may be called upon to support the emergency response efforts of the province, regional health authorities and neighbouring communities. Support that may be requested of local governments could include:

- providing facilities for temporary health care services, immunization and quarantine
- providing security services to hospitals and clinics where vaccines and antiviral medications may require additional protection
- providing information on the affected population and other local needs
- providing emergency social support to members of the community, including nonmedical care, transportation and monitoring the health status of the sick
- providing for increased burials and management of the deceased
- supporting child and family services with care and shelter for orphaned children (or children in need of temporary care due to the illness or death of parents) or to help essential workers continue with their duties
- providing advice or help to keep key businesses operating

3.4 Manage Financial Issues

The local government will need to manage the financial costs and economic impact of an emergency. This may include:

- tracking preparation, response and recovery costs for reimbursement of eligible costs, if financial assistance becomes available

- taking action to protect the local economy
- dealing with potential reduced revenue and increased expenditures

3.5 Help with Recovery

Local authorities are also responsible for co-ordinating

recovery plans and programs, between waves of pandemic and after they are over. They need to help with economic and organizational recovery and set up supports to recover as quickly as possible after the pandemic.

4. PLAN DEVELOPMENT

Using the information and assumptions on a pandemic (Section 2) and plan objectives (Section 3), develop the content of the contingency plan. This is actually a set of sub-plans. Include the problem, solutions, responsibilities and resources necessary for each.

4.1 Planning Process

4.1.1 Issue Identification and Analysis

Break down the pandemic hazard using these questions to compile the necessary information for your plan.

- a) **How would this hazard affect my community / organization?**
Learn about the pandemic hazard and the potential impact. Apply this information to your community to identify and estimate the types and magnitude of problems.

- b) **What are the specific problems we need to solve?**

Break the pandemic problems down to create a list of the specific issues you will need to deal with. Remember to consider issues within the local government organization as well as those in the community.

- c) **What actions are necessary to solve the problem?**

Document the strategies or actions necessary for dealing with each issue. Be creative when devising and choosing solutions. Remember that a more flexible range of solutions is desirable in most circumstances, since there is much that we will not know about a pandemic until it happens.

Once strategies are set, develop action procedures. These procedures should be action-oriented, and as concise and understandable as possible.

d) Who is responsible for what action?

Document responsibility for each solution to a specific organization or individual position. Don't forget to identify backups. For organizations outside of the local government, document their roles.

e) What resources are necessary to take these actions and where can we get them?

Document the resources (personnel, facilities, equipment, supplies or information) needed for individuals or agencies to carry out their roles. Note where these resources can be found, anticipate timelines and any necessary details about getting them.

4.1.2 Compile and Approve the Plan

Once the necessary information is collected, write the plan. You may wish to draw from your existing community emergency plan for format and style. Have the plan reviewed by the planning team and formally approved by local government.

4.1.3 Print and Distribute the Plan

Once it is approved, print and distribute the plan to all key personnel identified in it and their backups.

4.2 Plan Guidelines

Consider including the following in your pandemic emergency plan:

4.2.1 Co-ordination

a) External Emergency

Co-ordination

Document the organization required to co-ordinate local government operations and communications during a pandemic emergency. This should parallel the organization in your existing community emergency plan. Adapt it to the specific needs associated with the pandemic.

b) Internal Co-ordination Team

In addition to managing the community emergency, your co-ordination team will also have to co-ordinate the local government's human resource issues. This includes workplace safety and protection measures, internal communications, tracking employee health status and availability, and the re-assignment of personnel to critical services.

c) Emergency Operations Centre

Your existing community emergency plan outlines information for setting up and operating an emergency operations center (EOC). Consider the size and characteristics of the community EOC to protect the facility and those working in it. This may include having backups for all co-ordination team members, using a larger facility with more separation between participants. Or your plan may even include

a virtual EOC with co-ordination team members in different locations, connecting by phone and computer.

4.2.2 Pandemic Monitoring and Information Collection

While preparing now saves lots of time, the earliest possible warning gives more lead time to implement the community's pandemic contingency plans. Monitoring appropriate sources provides insight into the progress of the pandemic and up-to-date information on the disease and preventive measures. Both are critical to help you decide when and how to take further action. Assign someone the responsibility of monitoring these sources and alerting your pandemic co-ordination team.

Manitoba Health and your regional health authority will provide this information through regular channels such as Health Links-Info Santé, the media, websites and print materials.

4.2.3 Communication

To respond effectively to a pandemic, you will need frequent, effective communication with employees, unions, contractors, government agencies, the public, businesses and other organizations in your community. Open lines of communication will improve working relationships, co-ordination and co-operation, and will help create confidence and reduce fear.

Decide who you will communicate with, by what means and how often. Health messages and situation updates will be provided by Manitoba Health. Prepare general messages ahead of time to your residents about what community services they can expect to receive during the emergency and what they can do to help themselves.

It is critical that consistent messages be provided to the public. Communications planning for a pandemic must be co-ordinated with other response agencies. Manitoba Health will provide messages on how people can prevent illness, how to look after family members, and where to go for health services. These messages will be delivered through normal channels, such as the regional health authorities and Health Links-Info Santé.

4.2.4 Measures to Minimize Influenza Transmission

a) Hygiene

The spread of influenza can be reduced with proper hygiene. Communicate this information to staff, contractors, customers and visitors using posters, e-mail, etc.

- Frequent, thorough hand washing is very important, particularly after coughing, sneezing or before eating, drinking or smoking. Ensure facilities and supplies are available for staff and customers to wash their hands. Ordinary soap and water are adequate or, if running water is not available, alcohol-based hand rubs are effective.
- Cover the nose and mouth when sneezing or coughing, preferably with a disposable tissue. Be sure to dispose of tissues immediately.
- Avoid touching the nose, mouth or eyes, all of which are points of entry for the influenza virus.

Influenza Precautions

See Appendix B for information on proper hand-washing technique and Appendix C for other general advice on preventing influenza.

b) Managing Ill Workers

To reduce the spread of pandemic influenza at work, organizations must change their policies and ensure that sick employees do not come to the workplace until they are well.

- You must communicate, at the beginning of a pandemic, clear policies and guidelines on when employees do or do not report to work.
- Assure those who do not report to work because of illness or quarantine that their benefits will be covered while they are away. You may need to adjust policies to provide special coverage for those who do not have any sick time available.
- Provide employees with Manitoba Health's information on how to look after themselves, their children and others during a pandemic and other pertinent information on influenza.
- Monitor individual employee absenteeism (public health staff will notify local governments when reporting of absenteeism rates is required).

Your plan should also have a process to manage staff who become ill at work. Send employees home if they are ill and tell them to stay there for a minimum of 24 hours after symptoms have completely resolved. Follow the advice of public health officials at the time of a pandemic.

- Provide staff with Manitoba Health's influenza information, if you have not already done so.
- Backfill key positions when necessary.

c) Reduce Employee Interpersonal Exposure

To reduce exposure of staff to influenza, minimize their contact with customers or co-workers during the pandemic. This can be accomplished in several ways.

i. Reduce Interaction with Customers

Visiting with people experiencing flu symptoms or having them in the workplace should be avoided wherever possible. Communicate this through notices, signs and word-of-mouth.

Set rules for customer interactions:

- Talk to customers by alternate means such as in writing, by mail, fax, e-mail or telephone.
- Postpone meetings until the medical emergency is abated or reduced.

If you must meet customers:

- create buffer zones of at least one meter (three feet) between employees and customers, and
- keep the meetings as short as possible.

ii. Work from Home

Pandemic planning should consider giving key employees the necessary equipment to work from home. This may reduce their level of exposure to the virus and maintain a level of productivity. Where this is possible, write a plan to support or equip employees and

test it to ensure the technology and procedures work.

d) Outside of Work

Give everyone you contact any information that Manitoba Health has given you about avoiding locations or activities that represent a high risk of exposure.

e) Travel Health Advice and Travel Restrictions

Travelers should follow travel advice provided by public health officials. Travelers should also talk to a travel medicine provider, public health official, or doctor about their trip and any measures that they should take. During a pandemic, this information will be available by calling Health Links-Info Santé (788-8200 in Winnipeg; toll-free 1-888-315-9257) or by calling your local public health office.

4.2.5 Essential Services - Business Continuity Planning

While protective measures may slow the spread of disease in your organization, absenteeism may still be very high. You may not be able to keep every municipal service operating and it is important to prioritize.

- Keep critical services operating at all times even if it's at reduced levels. Develop plans and focus personnel and material resources to ensure your priority services are protected, supported and maintained. After you have

secured critical services, non-critical services may continue to operate. You may choose to temporarily suspend them, and re-assign staff and resources to critical services.

Residents will need to be notified of reductions in service or closures.

a) Document all Municipal Services

Create a list of all municipal services. Focus on the services, not the departments providing them. (For example, a fire department provides fire fighting and rescue services, which are critical. Fire prevention and inspection services are not and should be considered non-critical).

b) Prioritize Services

Identify services critical to the well-being of residents and estimate how they can be stopped or reduced without becoming critical. It is also useful to consider priorities in terms of customer needs during a pandemic.

Critical municipal services typically include:

- water treatment and distribution
- sewage and treatment systems
- police, fire and paramedic services
- road maintenance and snow clearing (critical repairs only)
- garbage removal
- social services and housing services

Non-critical services generally include:

- parks, libraries, community centres and recreational facilities
- administration, taxation, licensing, permits and planning

c) Document Required Resources

For each critical service identified above, document the resources required to provide it.

i. Human Resources

Document key positions, personnel and skills, and identify backups. These can include existing local government employees, contractors or recently retired employees who have the basic skills and knowledge to do the job. Ensure that backups know their roles and get the necessary training to do the job at an acceptable level. The plan should also contain backups for decision makers and financial authorities. List contact numbers for key employees and their backups so they can be contacted quickly and easily.

Set up a tracking system to manage staff and re-assign them to the areas where they are needed.

Maintain a list of essential-services employees who should get vaccines or antiviral medications first if there is a shortage.

Tell key personnel to advise and prepare their families to cope with an influenza pandemic without their presence.

ii. Physical Resources

Critical physical resources can include key equipment, vehicles, computers, communication systems, supplies and other materials.

- Note sources of goods, materials and services for your critical business operations. Check to see if your regular suppliers (and their suppliers) have emergency plans for business continuity.
- Identify alternate suppliers or products as a backup if your usual supplier is not available.
- Consider using resources that may be available from a non-critical department.
- Note what resources may have long lead times or may be difficult to find during a pandemic. Consider increasing inventories of critical supplies, parts, pandemic-related supplies, etc.
- Note what systems or equipment (computer or processing) rely on regular intervention or maintenance to operate properly. Note how long they can operate without intervention and plan around that.

iii. Information Resources

Ensure you have enough documentation and training for

employee backups to do their jobs without other support people.

Keep documents on key processes or equipment up-to-date and easy to find.

4.2.6 Recovery Plans

Recovery is generally one of the most overlooked aspects of emergency planning. Even without obvious physical or structural damage, municipal governments, the economy, employees, and general community well-being will be affected. Planning for recovery, between and after the pandemic waves, will help speed the return to normal, reduce stress and cut costs to the community.

A recovery plan should include:

- processes to manage donations of funds, goods and services
- co-operation with government and non-government agencies and programs in the recovery effort
- co-ordination of a multi-agency community needs assessment to focus on those affected and least able to cope financially or emotionally
- co-ordination of recovery activities including counseling services, social services, food banks, etc.
- keeping the public and target groups informed through the media, Internet, written materials or community meetings

a) Economic Recovery

Small and medium-size businesses are most likely to fail after a disaster. Specific sectors such as tourist and public venues, which may be closed during the pandemic, are likely to be among the hardest hit.

Local governments will need to work closely with business leaders to actively promote community support and economic development, through advertising and other development incentives to restore the local economy.

b) Psychological Recovery

Fear, the stress of caring for the sick, grieving for the dead, unemployment and many other social issues related to the pandemic will take an emotional toll on most of the population. People will be affected by the pandemic and its aftermath in various ways and to different degrees. Many will recover on their own, but some will need information or additional support to cope.

Consider developing plans to:

- distribute information provided by Manitoba Health
- provide feedback to your regional health authority on residents' concerns that were not addressed in information packages
- work with your regional health authority to provide counselling and debriefing sessions

- hold ceremonies to recognize the event
- encourage workers or residents with health concerns to go to the local RHA for advice and help

c) Organizational Recovery

Local government may face a variety of internal recovery challenges:

- Psychological stress, low morale and temporary loss of productivity are likely because of the deaths of co-workers, family or friends. Stress counseling and ceremonies to mark lost employees may be required.
- Loss of corporate knowledge is possible if employees die during a pandemic.
- You may need to recruit and train replacement employees and re-assign employees to maintain operations.
- There will be a backlog of work caused by business disruptions.

5. PREPAREDNESS

5.1 Maintain the Plan

Like your community emergency plan, contingency plans need to be updated periodically to include new information or practices.

They must reflect changes in the community and its organizations. Assign responsibility for periodic meetings and updating of documents to maintain the plan's relevance and accuracy.

5.2 Training and Awareness

Education raises awareness of the risk and can prepare individuals and organizations for their roles during a pandemic. Local governments should consider the following:

- Send participants on general emergency preparedness and response training or pandemic-specific training offered by government or private sector organizations.
- Hold sessions with the public, local businesses, and other organizations to raise awareness of the risks of a pandemic and the need to prepare themselves for this type of emergency.
- Hold employee training and awareness sessions on the risks and outline your organizational response to a pandemic.
- Provide necessary job training to staff who are expected to serve as backups to other key personnel.

5.3 Exercises

Exercises are a powerful tool that can be used to practise, educate, motivate and test plans, procedures, or technology. Municipal governments should consider the following:

- Participate in provincial or regional emergency response or pandemic-specific exercises when invited.
- Conduct community and internal emergency response and pandemic-specific exercises. For information on planning and conducting an exercise, contact the Manitoba Emergency Measures Organization (Appendix A).

5.4 Resource Development

Resources are critical to making sure your pandemic contingency plan works and that critical equipment and services remain operating. Local governments should budget for specific resources with long lead times or anticipated high demand to help the community cope with a pandemic.

6. CONCLUSION

The success of pandemic influenza planning and preparedness efforts depends on what we all put into the process. Diligent planning by local government and all community stakeholders will pay big dividends by protecting employees and residents and controlling the social, economic and psychological effects of a pandemic.

Pandemic planning is an opportunity to add to overall community preparedness. Parts of a pandemic plan can be effective during many other local community crises, such as a labour interruption. It can also improve the local government's ability to manage other operational risks associated with supply chains and transportation disruptions.

APPENDIX A - Further Information

GOVERNMENT OF MANITOBA

Manitoba Health - Office of the Chief
Medical Officer of Health

Phone: 204-788-6666

Fax: 204-948-2204

Website:

www.gov.mb.ca/health/publichealth/cmoh/

Pandemic webpage

[www.gov.mb.ca/health/publichealth/cmoh/
pandemic.html](http://www.gov.mb.ca/health/publichealth/cmoh/pandemic.html)

Preparing for Pandemic

Influenza in Manitoba

[www.gov.mb.ca/health/publichealth/cmoh/
docs/ppim.pdf](http://www.gov.mb.ca/health/publichealth/cmoh/docs/ppim.pdf)

Questions and Answers on Antiviral Drugs

[www.gov.mb.ca/health/publichealth/cmoh/
docs/antiviral_faq.pdf](http://www.gov.mb.ca/health/publichealth/cmoh/docs/antiviral_faq.pdf)

Questions and Answers on

Avian Influenza

[www.gov.mb.ca/health/publichealth/cmoh/
docs/avian_faq.pdf](http://www.gov.mb.ca/health/publichealth/cmoh/docs/avian_faq.pdf)

Questions and Answers on Pandemic Influenza Vaccine

[www.gov.mb.ca/health/publichealth/cmoh/
docs/piv_faq.pdf](http://www.gov.mb.ca/health/publichealth/cmoh/docs/piv_faq.pdf)

Questions and Answers on Public Health Measures During a Pandemic

[www.gov.mb.ca/health/publichealth/cmoh/
docs/phm_faq.pdf](http://www.gov.mb.ca/health/publichealth/cmoh/docs/phm_faq.pdf)

Manitoba Health - Office of Disaster Management

Phone: 204-945-1444

Fax: 204-948-2531

Website:

www.gov.mb.ca/health/odm/branch.html

Intergovernmental Affairs and Trade - Manitoba Emergency Measures Organization

Phone: 204-945-4772

Fax: 204-945-4620

Website: www.gov.mb.ca/emo/

Manitoba Emergency Plan

www.gov.mb.ca/emo/eplan/index.html

GOVERNMENT OF CANADA

Public Health Agency of Canada

Canadian Influenza Pandemic Plan

www.phac-aspc.gc.ca/cpip-pclcpi/

Avian Influenza

www.phac-aspc.gc.ca/influenza/avian_e.html

WORLD HEALTH ORGANIZATION (WHO)

www.who.int/csr/disease/avian_influenza/en/

DISASTER RECOVERY INFORMATION EXCHANGE - CENTRAL REGION

www.driecentral.org

APPENDIX B - Hand Hygiene

Hand washing/hand hygiene reduces the number of micro-organisms on the hands and is the most important practice to prevent the spread of infection.

WHEN:

Before:

- direct, hands-on care of others
- preparing, handling, serving or eating food
- feeding others

After:

- contact with items known or considered to be contaminated
- personal use of toilet, wiping nose or coughing

PRODUCTS:

Plain soap and water:

- recommended for routine hand washing

Alcohol-based hand rub:

- products containing a minimum of 60 per cent alcohol for use when plain soap and water are not available
- visible, heavy soil on hands should be removed before using alcohol-based hand rubs for maximum effectiveness

HOW TO WASH YOUR HANDS:

Using plain soap and water:

- Wet hands under warm running water.
- Apply soap and distribute over hands.
- Rub hands together vigorously for 10 to 15 seconds, to create a good lather.
- Using friction, cover all hand surfaces including fingernails, web spaces, thumbs and palms.
- Rinse under warm running water.
- Dry hands gently and thoroughly with a disposable towel.
- Turn off faucet using a clean disposable towel.

Using an alcohol-based hand rub:

- Apply two to three millilitres of the product to the palm of one hand.
- Rub hands together covering all surfaces including fingernails, web spaces, thumbs and palms.
- Let product dry 15 to 20 seconds.
- Ensure hands are completely dry before performing another task.

Appendix C - What can I do to prevent myself from getting infected with influenza during a pandemic?

If a new type of influenza emerges and causes a pandemic, the virus will likely spread just like other influenza viruses do each winter. Influenza is highly contagious and spreads quickly in families and communities. To reduce your risk of infection:

Improve your overall health

Healthier people are better at fighting disease. To stay healthy, eat healthy foods, live an active lifestyle and don't smoke. Avoid heavy alcohol consumption and try to maintain a positive, balanced psychological outlook.

Wash your hands often

Washing hands is the most effective way to prevent the spread of disease. Get into the habit of washing your hands often with soap and warm water, scrubbing your wrists, palms, fingers and nails for 10 to 15 seconds. Rinse and dry with a clean towel. This should be done especially before meals, after using the toilet and after you cough, sneeze or blow your nose. Teach your children to do the same.

Avoid visiting people who have the flu

This will help prevent you from becoming infected. This advice must be balanced with the need to provide support and care to sick people. Caregivers should wear masks when coming face to face with a coughing individual.

Avoid large crowds

Large crowds are ideal for the spread of influenza, so consider staying at home. Wearing masks to prevent transmission of influenza is not helpful when it is circulating in the community.

Don't share eating utensils or drinks

If a family member is sick, keep their personal items (ex: towels and toothbrushes) separate from those of the rest of the family.

Get a vaccine when available

Vaccination is the principal measure for preventing influenza and reducing the impact of epidemics. Various types of influenza vaccines have been available and used for more than 60 years.

Take antiviral drugs if recommended by your doctor.

Antivirals prevent and treat influenza. If taken within 48 hours of getting sick, they can reduce influenza symptoms, shorten the length of the illness and potentially reduce serious complications. Antivirals work by reducing the ability of the virus to reproduce. However, they do not provide immunity from the virus.

Antiviral drugs are not likely to be available in sufficient quantities to treat the majority of the population. Priority groups have been established through national collaboration and Manitoba will be using these priority groups for antiviral distribution during a pandemic.

What if I think I have the flu?

Most people with influenza recover without any serious problems. The disease can last four to seven days and leave people with a cough and fatigue for several weeks. In general, there is no specific treatment. Antivirals may occasionally be prescribed by your doctor. Antibiotics are not effective against the influenza virus, although they may reduce complications caused by bacteria, such as pneumonia. Avoid going to work or social gatherings if you are ill. Wear a mask if you need to visit your doctor. At the time of a pandemic, Manitoba Health will provide information on steps you can take to help care for yourself and others.

What if my child is sick?

Most children get better from influenza without any specific treatment. Sick children should be kept home from school and child care. At the time of a pandemic, Manitoba Health will provide information on steps you can take to help care for your children.

DURING A PANDEMIC, IT WILL BE IMPORTANT TO:

Follow directions given by public health.

Directions may change as more information becomes available about the characteristics of the particular virus causing the outbreak.

Follow infection control procedures if caring for a person with influenza.

Providing care to someone with influenza will be common during a pandemic. The likelihood of transmitting the disease is reduced by following basic precautions. Watch the Manitoba Health website for updates.



